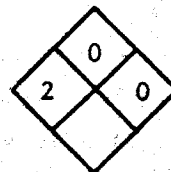




PROCESS chemicals

ADAPTED FROM MSDS
FORM NO. L5B - 005-4

MATERIAL SAFETY DATA SHEET

NFPA Designation

CHEMICAL NAME: Phosphoric Acid PLANT CODE: MATERIAL CODE NO.:
MANUFACTURER'S NAME: Hooker Chemicals & Plastics Corp. EMERGENCY TELEPHONE NO.: (716) - 278-7777
ADDRESS: (NUMBER, STREET, CITY, STATE AND ZIP CODE)
Niagara Falls, New York 14302
CHEMICAL NAME AND SYNONYMS: Orthophosphoric Acid TRADE NAME: Phosphoric Acid
CHEMICAL FORMULA: H₃PO₄ MOL. WT.: 98.00 Mfg of chemicals, food additives; metal-treating, etc
USES: Physical Properties

BOILING POINT (°F) (75% Soln)	275	SPECIFIC GRAVITY (H ₂ O = 1)	1.574
VAPOR PRESSURE (mmHg) @ 25°C	5.0	PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (= 1)	
SOLUBILITY IN WATER	very sol.		
APPEARANCE AND ODOR	Odorless, viscous liquid		

Fire and Explosion Hazard Data

FLASH POINT	METHOD	FLAMMABLE LIMITS	AUTOIGNITION TEMP.
none °F		UEL -- LEL --	none °F

EXTINGUISHING MEDIA

SPECIAL FIRE FIGHTING PROCEDURES As appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS Will liberate hydrogen upon contact with many metals.
Protect personnel against mist, vapor or splashes.

Reactivity

INCOMPATIBILITY Reacts vigorously with alkalis, producing heat; with many metals, producing heat and flammable hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS Heating to decomposition yields fumes of toxic phosphorus pentoxide.

CONDITIONS TO AVOID Avoid contact with skin and eyes. Avoid contact with strong alkalis or with metals except certain stainless steels.

Mlt. 11-1910

BOE-C6-0209848

Phosphoric Acid (Cont'd.)

Health Related Data

THRESHOLD LIMIT VALUE 1 milligram per cubic meter.

EFFECTS OF OVEREXPOSURE (SKIN, EYE, INHALATION, ETC.) Contact with skin and eyes causes irritation and can produce burns. Ingestion can cause irritation and burning of the mucous membranes of the gastro-intestinal tract. Inhalation of mist may cause irritation of the respiratory tract.

EMERGENCY AND FIRST AID PROCEDURES EYES & SKIN: Flush with large amounts of water.

INGESTION: Dilute by drinking large amounts of water, induce vomiting.

INHALATION: Removal to clean air is usually sufficient; for severe exposure, oxygen may be administered.

SPECIAL MEDICAL PROCEDURES Get medical attention for all over-exposures. Treatment is symptomatic and no specific antidotes are known.

Special Protection Information

VENTILATION General room ventilation.

RESPIRATORY (TYPE) Mist protection where appropriate.

GLOVES (TYPE) Rubber, neoprene.

EYE (TYPE) Chemical safety goggles, plus face shield where appropriate.

OTHER Rubber over leather shoes or rubber safety shoes. Rubber, or other impervious, clothing to protect against splashes.

SPECIAL PRECAUTIONS FOR HANDLING AND STORAGE Store away from heat and separately from alkalies. Neutralizing agents or absorbents and a ready supply of water should be available for emergency use.

STEPS TO TAKE IN EVENT OF SPILL OR RELEASE Get personnel protective equipment. Large spills, contain by dikes of sand, etc. If spill enters sewer, dilute with water.

Small spill, neutralize carefully with limestone or soda ash -- avoid caustic soda -- then rinse area with water.

WASTE DISPOSAL Flush to retention area, neutralize with limestone or controlled dilute caustic soda before discharge to stream or sewer. Bury acid-soaked clay as land fill.

REMARKS _____

REFERENCES MCA Chemical Safety Data Sheet SD-70; Phosphoric Acid (1958).

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other or additional considerations.

NAME G. W. Darling

LOC. Niagara

DATE February 1972

Revised Dec. 1976